Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-30 (canceled).

31. (previously presented) An image forming apparatus comprising:

a carriage having a recording head that ejects droplets of liquid onto a recording medium for forming an image on the recording medium; and

a state detector that detects presence of the recording medium along a moving line of said carriage,

wherein when moving said carriage in a main-scanning direction to perform a printing operation, a part of the printing operation is cancelled after said state detector detects non-presence of the recording medium, and

wherein said state detector is provided on an upstream side of said carriage in a feed direction of the recording medium, and the printing operation is started in a subsequent main-scanning after said recording medium is conveyed and said state detector detects an edge of the recording medium while scanning said carriage in the main-scanning direction in a current main-scanning, and a controller receives detection information from said state detector when said state detector detects the edge of the recording medium in the main-scanning direction for each main-scanning of said carriage, and the controller determines therefrom a position of the edge of the recording medium for the printing operation of a subsequent line.

32. (original) The image forming apparatus as claimed in claim 31, wherein said state detector is provided on an upstream side of said carriage in the main-scanning direction so as to cancel the part of the printing operation in the main-scanning direction after a position where non-presence of the recording medium is detected by said state detector in an initial scanning of said carriage for printing.

33. (currently amended) The image forming apparatus as claimed in claim 31, wherein said state detector is provided on an upstream side of said carriage in the main-scanning direction so as to cancel the part of the printing operation in the main-scanning direction while detecting a position where the recording medium is not present for each main-scanning of said carriage for printing.

34. (original) The image forming apparatus as claimed in claim 31, wherein a plurality of heads are provided in the recording head so as to eject droplets in a plurality of colors by being arranged in the main-scanning direction, and the main-scanning of said carriage is continued after non-presence of the recording medium is detected by said state detector so as to cancel a printing operation of each of the heads step-by-step while moving the carriage in the main-scanning direction.

35. (original) The image forming apparatus as claimed in claim 34, wherein an amount of movement of said carriage in the main-scanning direction and cancellation of the printing operations of the heads step-by-step are controlled, after the non-presence of the recording paper is detected, in accordance with information regarding an adjustment value of intervals between

the heads.

36. (original) The image forming apparatus as claimed in claim 31, wherein a plurality of nozzle trains are provided in the recording head so as to eject droplets in a plurality of colors by being arranged in the main-scanning direction, and the main-scanning of said carriage is continued after non-presence of the recording medium is detected by said state detector so as to cancel a printing operation of each of the nozzle trains step-by-step while moving the carriage in the main-scanning direction.

37. (original) The image forming apparatus as claimed in claim 31, wherein said carriage is movable bidirectionally so as to perform bidirectional printing, and, when a part of the printing operation in one direction is cancelled, a part of the printing operation corresponding to an area where the printing operation is cancelled in the one direction is also cancelled in the printing operation in the other direction.

38. (withdrawn) The image forming apparatus as claimed in claim 31, wherein said carriage is movable bidirectionally so as to perform bidirectional printing, and, said state detector is provided on each side of said carriage in the main-scanning direction.

Claim 39 (canceled).

40. (previously presented) The image forming apparatus as claimed in claim 31, wherein a plurality of heads are provided in the recording head so as to eject droplets in a plurality of

colors by being arranged in the main-scanning direction, and the main-scanning of said carriage is continued beyond the edge of the recording medium detected by said state detector so as to cancel the printing operation of the heads step-by-step.

41. (original) The image forming apparatus as claimed in claim 40, wherein an amount of movement of said carriage in the main-scanning direction and cancellation of the printing operations of the heads step-by-step are controlled, after each of said heads passes the edge of the recording medium, in accordance with information regarding an adjustment value of intervals between the heads.

42. (previously presented) The image forming apparatus as claimed in claim 31, wherein a plurality of nozzle trains are provided in the recording head so as to eject droplets in a plurality of colors by being arranged in the main-scanning direction, and the main-scanning of said carriage is continued beyond the edge of the recording medium detected by said state detector so as to cancel the printing operation of the nozzle trains step-by-step.

43. (previously presented) The image forming apparatus as claimed in claim 31, wherein said state detector is provided at a position corresponding to the nozzle train closest to an edge off said recording head in the main-scanning direction.

44. (original) The image forming apparatus as claimed in claimed 31, further comprising a conveyance belt that conveys the recording medium by electrostatically attracting the recording medium onto a surface of the conveyance belt.

45. (previously presented) The image forming apparatus as claimed in claimed 31, wherein said state detector is provided on the upstream side of the carriage in the paper feed direction to monitor a width of a printing line subsequent to the current printing line, so that the subsequent printing operation is performed based on the width determined in the previous printing operation.